

CLAIMS

We claim:

1. A method for defining a workflow, comprising the steps of:
5 accessing a template that indicates parameters for defining workflows;
creating a definition of a first workflow based on said template; and
storing said definition of said first workflow.

10 2. A method according to claim 1, wherein:
said template includes a set of parameters for each action available to a
workflow type.

15 3. A method according to claim 1, wherein:
said template is an XML document.

20 4. A method according to claim 1, further comprising the steps of:
adding data to said template after said step of storing;
creating a definition of a second workflow after said step of adding data; and
storing said definition of said second workflow.

5. A method according to claim 1, further comprising the step of:
creating said template.

25 6. A method according to claim 5, wherein said step of creating said
template includes the steps of:
adding a set of workflow types to said template;
adding one or more actions for at least a subset of said workflow types; and
adding parameters for at least a subset of said actions.

30 7. A method according to claim 1, wherein:
said template applies to only one application.

8 A method according to claim 1, wherein:

said template includes parameters for creating objects, deleting objects and changing attributes.

5 9. A method according to claim 1, wherein:

said template includes parameters for self registration.

10. A method according to claim 1, wherein:

10 said template includes a parameter indicating whether supplied variables can be used in said step of creating.

11. A method according to claim 1, wherein:

15 said template includes a parameter indicating whether additional workflows can be used to supply data.

12. A method according to claim 11, wherein:

said additional workflows includes multiple levels of nesting of workflows.

13. A method according to claim 1, wherein:

20 said steps of accessing, creating and storing are performed by an integrated identity and access system.

14. A method according to claim 1, wherein said step of creating includes the step of:

25 accessing one or more parameters in said template;
offering a set of options based on said accessed parameters; and
receiving a selection of one or more of said offered options.

15. A method according to claim 1, wherein said step of creating includes
30 the steps of:

determining a first set of possible actions for a particular step based on said template;

reporting said first set of possible actions; and
receiving a selection of a first action of said first set of possible actions.

16. A method according to claim 1, wherein said step of creating includes
5 the steps of:

determining a first set of possible data types for a particular action based on
said template;

reporting said first set of possible data types;

receiving an indication of a variable for said first workflow; and

10 receiving a selection of a first data type for said variable.

17. A method according to claim 16, wherein:

said first data type is a variable supplied by another workflow.

18. A method according to claim 1, wherein said step of creating includes
15 the steps of:

determining whether pre actions are available for a particular action based on
said template;

reporting whether pre actions are available for said particular action; and

20 receiving a selection of whether to add pre actions to said definition of said
first workflow for said particular action.

19. A method according to claim 1, wherein said step of creating includes
the steps of:

25 determining a first set of possible entry conditions for a particular action based
on said template;

reporting said a first set of possible entry conditions;

receiving a selection of a first entry condition of said first set of possible entry
conditions;

30 determining and reporting whether said first entry condition is associated with
a sub-workflow; and

receiving an indication whether said first workflow should wait for said sub-

workflow.

20. A method according to claim 1, wherein said step of creating includes the steps of:

5 determining a first set of possible actions for a particular step based on said template;

reporting said first set of possible actions;

receiving a selection of a first action of said first set of possible actions;

10 determining a first set of possible data types for said first action based on said template;

reporting said first set of possible data types;

receiving an indication of a variable for said first workflow;

receiving a selection of a first data type for said variable;

15 determining whether pre or post actions are available for said first action based on said template;

reporting whether pre or post actions are available for said first action;

receiving a selection of whether to add pre or post actions to said definition of said first workflow for said first action;

20 determining a first set of possible entry conditions for said first action based on said template;

reporting said a first set of possible entry conditions;

receiving a selection of a first entry condition of said a first set of possible entry conditions;

25 determining and reporting whether said first entry condition is associated with a sub-workflow; and

receiving an indication whether said first workflow should wait for said sub-workflow.

30 21. A method according to claim 1, wherein said step of creating includes the steps of:

accessing one or more parameters in said template;

offering a set of options in a graphical user interface based on said accessed

parameters; and

receiving a selection of one or more of said offered options using said graphical user interface.

22. One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a method comprising the steps of:

accessing a template that indicates parameters for defining workflows;
creating a definition of a first workflow based on said template; and
storing said definition of said first workflow.

23. One or more processor readable storage devices according to claim 22, wherein said method further comprises the steps of:

adding data to said template after said step of storing;
creating a definition of a second workflow after said step of adding data; and
storing said definition of said second workflow.

24. One or more processor readable storage devices according to claim 22, wherein said method further comprises the step of creating said template, said step of creating said template includes the steps of:

adding a set of workflow types to said template;
adding one or more actions for at least a subset of said workflow types; and
adding one or more parameters for at least a subset of said actions.

25. One or more processor readable storage devices according to claim 22, wherein:

said template includes parameters for self registration.

26. One or more processor readable storage devices according to claim 22, wherein:

said template includes a parameter indicating whether additional workflows

can be used to supply data.

27. One or more processor readable storage devices according to claim 26,
wherein:

5 said additional workflows includes multiple levels of nesting of workflows.

28. One or more processor readable storage devices according to claim 22,
wherein:

10 said steps of accessing, creating and storing are performed by an integrated
identity and access system.

29. One or more processor readable storage devices according to claim 22,
wherein said step of creating includes the steps of:

15 accessing one or more parameters in said template;
offering a set of options in a graphical user interface based on said accessed
parameters; and

receiving a selection of one or more of said offered options using said
graphical user interface.

20 30. One or more processor readable storage devices according to claim 22,
wherein said step of creating includes the steps of:

determining a first set of possible actions for a particular step based on said
template;

25 reporting said first set of possible actions; and
receiving a selection of a first action of said first set of possible actions.

31. One or more processor readable storage devices according to claim 22,
wherein said step of creating includes the steps of:

30 determining a first set of possible data types for a particular action based on
said template;

reporting said first set of possible data types;
receiving an indication of a variable for said first workflow; and

receiving a selection of a first data type of said variable, said first data type is a variable supplied by another workflow.

32. One or more processor readable storage devices according to claim 22,
5 wherein said step of creating includes the steps of:

determining a first set of possible entry conditions for a particular action based on said template;

reporting said first set of possible entry conditions;

receiving a selection of a first entry condition of said first set of possible entry
10 conditions;

determining and reporting whether said first entry condition is associated with a sub-workflow; and

receiving an indication whether said first workflow should wait for said sub-workflow.
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33. An apparatus that can be used to define a workflow, comprising:
a communication interface; and
one or more processors in communication with said communication interface,
said one or more processors perform a method comprising the steps of:

20 accessing a template that indicates parameters for defining workflows,
creating a definition of a first workflow based on said template, and
storing said definition of said first workflow.

34. An apparatus according to claim 33, wherein:
25 said template includes a parameter indicating whether additional workflows
can be used to supply data, said additional workflows includes multiple levels of
nesting of workflows.

35. An apparatus according to claim 33, wherein:
30 said steps of accessing, creating and storing are performed by an integrated
identity and access system.

36. An apparatus according to claim 33, wherein said step of creating includes the steps of:

accessing one or more parameters in said template;

offering a set of options in a graphical user interface based on said accessed

parameters; and

receiving a selection of one or more of said offered options using said graphical user interface.

37. An apparatus according to claim 33, wherein said step of creating includes the steps of:

determining a first set of possible actions for a particular step based on said template;

reporting said a first set of possible actions; and

receiving a selection of a first action of said a first set of possible actions.

38. An apparatus according to claim 33, wherein said step of creating includes the steps of:

determining a first set of possible data types for a particular action based on said template;

reporting said first set of possible data types;

receiving an indication of a variable for said first workflow; and

receiving a selection of a first data type of said variable, said first data type is a variable supplied by another workflow.

39. An apparatus according to claim 33, wherein said step of creating includes the steps of:

determining a first set of possible entry conditions for a particular action based on said template;

reporting said a first set of possible entry conditions;

receiving a selection of a first entry condition of said first set of possible entry conditions;

determining and reporting whether said first entry condition is associated with

a sub-workflow; and

receiving an indication whether said first workflow should wait for said sub-workflow

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